



EASTERN RESEARCH GROUP, INC.

MEMORANDUM

TO: Bill Maxwell, U.S. Environmental Protection Agency (EPA),
Office of Air Quality Planning Standards (OAQPS) (MD-13)

FROM: Heather Wright, Eastern Research Group (ERG), Morrisville

DATE: December 7, 1998

SUBJECT: Final Summary of the September 15, 1998 Meeting of the Industrial Combustion
Coordinated Rulemaking (ICCR) Process Heater Work Group

1.0 INTRODUCTION

- The meeting was held on September 15, 1998 in Durham, North Carolina. A complete list of meeting participants with their affiliations is included as attachment 1.
- This was the final meeting of the ICCR Process Heater Work Group (PHWG). Meeting attendees discussed the “Works In Progress” presentation for the September 17 Coordinating Committee (CC) meeting and the controlled units analysis performed by Lee Gilmer. The flash minutes for the meeting are included as attachment 2.

2.0 SUMMARY OF DISCUSSION AND DECISIONS

Work Group discussions are summarized in the following sections:

2.1 Final Work Group Presentation to the Coordinating Committee

2.2 Controlled Units Analysis

2.1 Final Work Group Presentation to the Coordinating Committee

Bill Maxwell presented the draft slides for the “Works In Progress” presentation. A copy of the draft presentation is provided as attachment 3.

- Mr. Maxwell explained that the purpose of the presentation is to summarize for the CC the current work being performed by the PHWG. The Work Group has identified four works in progress to be forwarded to the CC and is also providing the refined inventory,

emissions, and survey databases for informational purposes. (Mr. Maxwell noted that the inventory database has been updated to include all Work Group member comments.) The presentation will begin with an introductory slide and the database analysis flow diagram (provided as attachment 4). These slides will be followed by a discussion of the MACT determination analysis for gas and fuel oil-fired units and a summary of the overall findings from the MACT evaluation process. The presentation will conclude with status updates on other-fired process heaters and coke oven gas.

- ▶ Work Group members drafted new language for the other-fired process heaters slides. The slides were revised to reflect that the data indicate that less than 6% of units burning crude oil, residual oil, other solids, and other liquids have some form of pollution control, while greater than 12% of units burning wood are believed to be controlled. Work Group members also decided to add that the PHWG has not performed a complete evaluation as to whether the add-on controls identified have any affect on hazardous air pollutants (HAPs).
- ▶ Work Group members also drafted new language for the coke oven gas slides. A bullet was added to say that after conventional by-product recovery, coke oven gas is similar in composition to natural gas and other process gases and that the combustion of coke oven gas is believed to result in levels of HAP emissions similar to those of natural gas and process gas combustion. A Work Group member questioned whether the slide with the information on VOC and coke oven gas should be included, because the focus of the presentation is on HAP emissions. It was agreed that the VOC slide would be pulled out of the presentation, unless Dave Ailor objected.
- The Work Group decided to summarize and present their overall findings in a slide that will be shown at the end of the presentation. Meeting attendees drafted three concluding statements for the overall “findings” slide.
 - ▶ A statement was drafted to say that since a best performing 12% of sources could not be identified, there is no MACT floor.
 - ▶ A second statement was added to say that there is no MACT for units firing gas and fuel oil, because no add-on controls or combustion practices that reduce HAPs could be identified.
 - ▶ A third statement was drafted to say that with the possible exception of certain wood-fired units, similar findings appear to apply to other-fired units, following a preliminary review of add-on controls for HAP effectiveness.
- The Work Group decided that the following individuals will cover the five major topics for presentation during the CC meeting: Bill Maxwell - Introduction, Chuck Feerick - MACT evaluation and determination for gas and fuel oil-fired process heaters, John Ogle - Other-fired process heaters, Dave Ailor - Coke oven gas, and Lee Gilmer - Findings.

- Bill Maxwell will revise the slides on other-fired process heaters and coke oven gas as agreed during the meeting and will also draft a “findings” slide as discussed by Work Group members. Mr. Maxwell will distribute hard copies of the revised slide presentation to Work Group members on September 16 for final review before the presentation on September 17.

2.2 Controlled Units Analysis

Lee Gilmer presented a summary of the controlled units analysis. Handouts are provided as attachment 5.

- The Work Group discussed the controlled units analysis performed by Mr. Gilmer. Mr. Gilmer reviewed the available control information for indirect, cartoon process heaters firing gas (with the exception of coke oven gas and “other” process gas), crude/residual oil, and fuel oil. He first determined if the controls were associated with process emissions or combustion unit emissions. If the controls were associated with the combustion unit, it was then determined whether they could have an effect on HAP emissions.
- It was noted that a similar add-on control analysis must be performed for units firing coke oven gas and that no units identified in the database as firing “other” process gas have any add-on controls.
- Work Group members decided that the controlled units analysis will be forwarded to the Coordinating Committee at the upcoming meeting.

3.0 UPCOMING MEETINGS

There will be no future meetings of the Process Heater Work Group.

These minutes represent an accurate description of matters discussed and conclusions reached and include a copy of all reports received, issued, or approved at the September 15, 1998 meeting of the Industrial Combustion Coordinated Rulemaking (ICCR) Process Heater Work Group. Fred Porter, EPA Co-Chair.

Attachment 1

Meeting Participants

Meeting Participants

Chuck Feerick, Exxon Company USA

Bruno Ferraro, Grove Scientific Company

Lee Gilmer, Texaco, Inc.

Jason Huckaby, Eastern Research Group, Inc.

Mary Lalley, Eastern Research Group, Inc.

Bill Maxwell, U.S. EPA, Office of Air Quality Planning and Standards

John Ogle, Dow Chemical Company

Fred Phillips, Clean Burn, Inc.

David Schanbacher, Texas Natural Resource Conservation Commission, Office of Air Quality

Jim Seebold, Chevron Research & Technology Company

Bob Walker, Chevron Corporation

Heather Wright, Eastern Research Group, Inc.

Attachment 2

Flash Minutes From The September 15, 1998 Meeting Of The ICCR Process Heater Work Group

INDUSTRIAL COMBUSTION COORDINATED RULEMAKING (ICCR) PROCESS HEATER WORK GROUP MEETING

SEPTEMBER 15, 1998
DURHAM, NORTH CAROLINA

DISCUSSION AND DECISIONS

- The Work Group discussed the “Works In Progress” presentation for the September 17 Coordinating Committee meeting.
- The Work Group members decided to draft alternative language for the other-fired process heaters slides.
- The Work Group members also decided to draft new language for the coke oven gas slide. In addition, the Work Group decided to summarize and present their overall findings in a slide that will be shown at the end of the presentation; members drafted three concluding statements for the “findings” slide.
- The Work Group decided that the following individuals will cover the five major topics for presentation during the Coordinating Committee meeting: Bill Maxwell - Introduction, Chuck Feerick - MACT evaluation and determination for gas- and fuel oil-fired process heaters, John Ogle - Other-fired process heaters, Dave Ailor - Coke oven gas, and Lee Gilmer - Findings.
- The Work Group also discussed the controlled units analysis performed by Lee Gilmer. Mr. Gilmer reviewed the available control information for indirect, cartoon process heaters firing gas (with the exception of coke oven gas and other process gas), residual oil, and fuel oil. Mr. Gilmer determined that none of the controls identified effect HAP emissions.
- The Work Group members decided that the controlled units analysis will be included with the informational items/database work to be forwarded to the Coordinating Committee at the upcoming meeting.

ACTION ITEMS

- Bill Maxwell will revise the slides on other-fired process heaters and coke oven gas as agreed during the meeting and will also draft a “findings” slide as discussed by Work Group members. Mr. Maxwell will distribute hard copies of the revised slide presentation to Work Group members on September 16 for final review before the presentation.

UPCOMING MEETINGS

- There will be no future meetings of the Process Heater Work Group.

Attachment 3

Draft “Works In Progress” Presentation
(Handouts unavailable electronically, please refer to docket copy.)

Attachment 4

Database Analysis Flow Diagram

(Handout unavailable electronically, please refer to docket copy.)

Attachment 5

**Controlled Units Analysis:
Natural Gas, Process Gas, Fuel Oil, and Crude/Residual Oil**

(Handouts unavailable electronically, please refer to docket copy.)